

WHAT IS CLAIMED IS:

- 1 1. A method for splicing network connections, said method
2 comprising:
3 receiving a first handoff request from a first node,
4 wherein the first node is connected to a client
5 node using a first connection;
6 identifying a second node based on a second node
7 identifier, wherein the second node is connected
8 to the first node using a second connection;
9 updating one or more connection tables with data
10 corresponding to the first and second
11 connections; and
12 redirecting one or more client packets sent over the
13 first connection from the client node to the
14 second node in response to the updated connection
15 tables.
- 1 2. The method as described in claim 1 wherein the
2 updating further comprises:
3 writing a first entry to a first mapping table, the
4 first entry including a client identifier
5 corresponding to the client node, a first node
6 identifier corresponding to the first node, and a
7 pointer to a second mapping table;
8 creating the second mapping table; and
9 writing a second entry in the second mapping table,
10 the second entry including the second node
11 identifier.
- 1 3. The method as described in claim 2 further comprising:
2 writing a third entry in the second mapping table in
3 response to receiving a second handoff request,

4 the third entry identifying a third node, wherein
5 the second entry includes a first handoff
6 sequence value corresponding to the first handoff
7 request and wherein the third entry includes a
8 second handoff sequence value corresponding to
9 the second handoff request;
10 receiving a request from the client, the request
11 including a request sequence value corresponding
12 to the request; and
13 redirecting the request to the third node in response
14 to the request sequence value being greater than
15 or equal to the second handoff sequence value.

1 4. The method as described in claim 3 further comprising:
2 redirecting the request to the second node in response
3 to the request sequence value being greater than
4 or equal to the first handoff sequence value and
5 less than the second handoff sequence value.

1 5. The method as described in claim 1 further comprising:
2 writing a first reverse mapping entry to the first
3 mapping table, the first reverse mapping entry
4 including the second node identifier, the first
5 node identifier and a pointer to a reverse
6 mapping table;
7 creating the reverse mapping table; and
8 writing a second reverse mapping entry in the reverse
9 mapping table, the reverse mapping entry
10 including the client node identifier.

1 6. The method as described in claim 5 further comprising:
2 receiving a packet from the second node that includes
3 a destination address identifying the first node;

4 matching the packet to the first reverse mapping
5 entry;
6 retrieving the client node identifier from the reverse
7 mapping table in response to the matching; and
8 changing the destination address to identify the
9 client node identifier.

1 7. The method as described in claim 1 further comprising:
2 redirecting one or more response packets sent by the
3 second node over the second connection to the
4 client node in response to the updated tables.

1 8. An information handling system comprising:
2 one or more processors;
3 a memory accessible by the processors;
4 a network interface connecting the information
5 handling system to a computer network; and
6 a connection splicing tool for splicing connections
7 between nodes, the connection splicing tool
8 including:
9 means for receiving a first handoff request from
10 a first node, wherein the first node is
11 connected to a client node using a first
12 connection over the computer network;
13 means for identifying a second node based on a
14 second node identifier, wherein the second
15 node is connected to the first node using a
16 second connection over the computer network;
17 means for updating one or more connection tables
18 stored in the memory with data corresponding
19 to the first and second connections; and

20 means for redirecting one or more client packets
21 sent over the first connection from the
22 client node to the second node in response
23 to the updated connection tables.

1 9. The information handling system as described in claim
2 8 wherein the means for updating further comprises:
3 means for writing a first entry to a first mapping
4 table stored in the memory, the first entry
5 including a client identifier corresponding to
6 the client node, a first node identifier
7 corresponding to the first node, and a pointer to
8 a second mapping table stored in the memory;
9 means for creating the second mapping table; and
10 means for writing a second entry in the second mapping
11 table, the second entry including the second node
12 identifier.

1 10. The information handling system as described in claim
2 9 further comprising:
3 means for writing a third entry in the second mapping
4 table in response to receiving a second handoff
5 request, the third entry identifying a third node
6 connected to the computer network, wherein the
7 second entry includes a first handoff sequence
8 value corresponding to the first handoff request
9 and wherein the third entry includes a second
10 handoff sequence value corresponding to the
11 second handoff request;
12 means for receiving a request from the client over the
13 computer network, the request including a request
14 sequence value corresponding to the request; and

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15 means for redirecting the request to the third node in
16 response to the request sequence value being
17 greater than or equal to the second handoff
18 sequence value.

1 11. The information handling system as described in claim
2 10 further comprising:

3 means for redirecting the request to the second node
4 in response to the request sequence value being
5 greater than or equal to the first handoff
6 sequence value and less than the second handoff
7 sequence value.

1 12. The information handling system as described in claim
2 8 further comprising:

3 means for writing a first reverse mapping entry to the
4 first mapping table, the first reverse mapping
5 entry including the second node identifier, the
6 first node identifier and a pointer to a reverse
7 mapping table stored in the memory;

8 means for creating the reverse mapping table in the
9 memory; and

10 means for writing a second reverse mapping entry in
11 the reverse mapping table, the reverse mapping
12 entry including the client node identifier.

1 13. The information handling system as described in claim
2 12 further comprising:

3 means for receiving a packet from the second node over
4 the computer network, the packet including a
5 destination address identifying the first node;

6 means for matching the packet to the first reverse
7 mapping entry;

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8 means for retrieving the client node identifier from
9 the reverse mapping table in response to the
10 matching; and
11 means for changing the destination address to identify
12 the client node identifier.

1 14. The information handling system as described in claim
2 8 further comprising:

3 means for redirecting one or more response packets
4 sent by the second node over the second
5 connection to the client node in response to the
6 updated tables.

1 15. A computer program product stored in a computer
2 operable media for splicing network connections, said
3 computer program product comprising:

4 means for receiving a first handoff request from a
5 first node, wherein the first node is connected
6 to a client node using a first connection;
7 means for identifying a second node based on a second
8 node identifier, wherein the second node is
9 connected to the first node using a second
10 connection;
11 means for updating one or more connection tables with
12 data corresponding to the first and second
13 connections; and
14 means for redirecting one or more client packets sent
15 over the first connection from the client node to
16 the second node in response to the updated
17 connection tables.

1 16. The computer program product as described in claim 15
2 wherein the means for updating further comprises:

3 means for writing a first entry to a first mapping
4 table, the first entry including a client
5 identifier corresponding to the client node, a
6 first node identifier corresponding to the first
7 node, and a pointer to a second mapping table;
8 means for creating the second mapping table; and
9 means for writing a second entry in the second mapping
10 table, the second entry including the second node
11 identifier.

1 17. The computer program product as described in claim 16
2 further comprising:

3 means for writing a third entry in the second mapping
4 table in response to receiving a second handoff
5 request, the third entry identifying a third
6 node, wherein the second entry includes a first
7 handoff sequence value corresponding to the first
8 handoff request and wherein the third entry
9 includes a second handoff sequence value
10 corresponding to the second handoff request;
11 means for receiving a request from the client, the
12 request including a request sequence value
13 corresponding to the request; and
14 means for redirecting the request to the third node in
15 response to the request sequence value being
16 greater than or equal to the second handoff
17 sequence value.

1 18. The computer program product as described in claim 17
2 further comprising:

3 means for redirecting the request to the second node
4 in response to the request sequence value being

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5         greater than or equal to the first handoff
6         sequence value and less than the second handoff
7         sequence value.

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1 19. The computer program product as described in claim 15
2 further comprising:
3 means for writing a first reverse mapping entry to the
4 first mapping table, the first reverse mapping
5 entry including the second node identifier, the
6 first node identifier and a pointer to a reverse
7 mapping table;
8 means for creating the reverse mapping table; and
9 means for writing a second reverse mapping entry in
10 the reverse mapping table, the reverse mapping
11 entry including the client node identifier.

1 20. The computer program product as described in claim 19
2 further comprising:
3 means for receiving a packet from the second node that
4 includes a destination address identifying the
5 first node;
6 means for matching the packet to the first reverse
7 mapping entry;
8 means for retrieving the client node identifier from
9 the reverse mapping table in response to the
10 matching; and
11 means for changing the destination address to identify
12 the client node identifier.